

Remarks/Arguments

Reconsideration of this application is requested.

Request for Continued Examination

A request for continued examination (RCE) is enclosed in response to the final office action mailed on January 25, 2006. An Information Disclosure Statement submitting an English language translation of the primary reference Hayashi (JP 2002-016312) is also enclosed.

Claim Status

Claims 9, 10 and 12-32 were previously presented. Claims 15, 16 and 21-32 are canceled, without prejudice. Claims 9, 10, 12-14 and 17-20 are now pending.

Allowable Subject Matter

The indication of allowable subject matter in claim 10 is noted and appreciated. As discussed below, claim 10 is amended to resolve any issues under 35 USC 112, second paragraph, and is now in condition for allowance.

Claim Rejections – 35 USC 112 – First Paragraph

Claims 15-17 and 21-23 are rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement. Claims 15, 16 and 21-23 are canceled, without prejudice, rendering the rejections of those claims moot. With respect to claim 17, the Action asserts that claim 10 (from which claim 17 depends) is directed to the embodiment of Figs. 1-7, whereas claim 17 is directed to the embodiment of Figs. 8A-8D. Thus, according to the Action, claim 17 represents a “combination” of embodiments that was not described in the specification. Applicant respectfully traverses the rejection and submits that the Examiner has misconstrued claims 10 and 14 as readable only on the first embodiment of Figs. 1-7.

Claim 17 depends from claim 14, which depends from base claim 10. Base claim 10 (as amended) recites “protrusions whose surfaces include regions out of stoichiometric compositions”. As noted at page 17, lines 4-8, of applicant’s

specification, in reference to Figures 1-7, these regions of stoichiometric composition result from the formation of p-type electrode 19 on contact layer 16, and may be related to improvements in contact resistance. Although the embodiment shown in Figs. 8A-8D differs from the embodiment of Figs. 1-7 in the manner in which protrusions 18 are formed, a p-type electrode 19 is still formed over contact layer 16 and protrusions 18 (see page 20, line 26 to page 21, line 1), and thus will also result in regions of stoichiometric composition on the protrusions, although the protrusions are configured differently relative to those of Figures 1-7. Thus, base claim 10 could read on either of Figs. 1-7 or Figs. 8A-D.

Claim 14 recites that the protrusions may be small or large ones. Clearly, both embodiments include relatively smaller and relatively larger protrusions (see, e.g., Fig. 5A and Fig. 8D). Claim 17 defines the protrusions a step further, stating that the large protrusions are higher in height than the smaller protrusions. Claim 17 reads only on the embodiment of Figs. 8D, which show that the larger protrusions are higher, whereas the protrusions of Fig. 5A have similar heights.

Thus, claim 17 is directed specifically to the second embodiment, whereas claims 14 and 10 from which it depends have a breadth sufficient to cover both embodiments. Thus, there is no combination of embodiments that was not disclosed in the specification.

Claim Rejections -35 USC 112 – Second Paragraph

Claims 9, 10 and 12-32 are rejected under 35 USC 112, second paragraph, as indefinite. In response, independent claims 9, 10 and 12 are amended as suggested to recite fine recesses formed on *side and top surfaces of the protrusions* (claims 9, 12) or *protrusions whose surfaces include* regions with stoichiometric compositions. Applicant submits that these amendments render claims 9, 10 and 12 clear and grammatically correct, and that the rejections under 35 USC 112, second paragraph should be withdrawn.

Claim Rejections – 35 USC 102(b) and 103

Claims 9, 12, 13, 15, 18, 19 and 21 are rejected under 35 USC 102(b) as anticipated by Hayashi (JP 2002-016312). Claims 16, 22, 24, 25, 27, 29, 30 and 32 are rejected as obvious over Hayashi. Claims 15, 16 and 21-32 are canceled, without prejudice, rendering the rejections of those claims moot. With respect to remaining claims 9, 12-14 and 17-20, applicant again respectfully traverses the rejections.

An English language translation of Hayashi prepared by application is enclosed with this amendment (along with an Information Disclosure Statement). Contrary to the Examiner's assertion, there is no disclosure or suggestion in Hayashi (see, e.g., paragraphs [0105] to [0109]) that any fine recesses are formed on surfaces of the protrusions on layer 21, nor any rationale or reason that such recesses should be formed.

The Action includes a blown-up version of Hayashi's Fig. 7(f), with protrusions in layer 21 numbered 1-11, and apparently regards slight width differences, printing inconsistencies and variances in line quality as equivalent to applicant's claimed fine recesses. Applicant respectfully traverses this line of argument and submits that one of ordinary skill in the art would not be motivated by Hayashi to form fine recesses on the protrusions formed in Hayashi's layer 21. Hayashi discloses a substrate 21 having a "concave/convex" shape, and provides no disclosure, suggestion or reason to form fine recesses within those concave/convex portions.

Moreover, even in the magnification of Fig. 7(f) provided by the action, while there may be some unexplained slight steps in the side surfaces between the protrusions (e.g., between the third and fourth protrusions), there are clearly no recesses formed in the top surfaces of the protrusions. Even in the enlargement of Fig. 7(f) provided by the Action, the top surfaces of all protrusions are indisputably flat and smooth. Contrast this disclosure to applicant's Fig. 5B, which shows

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multiple and well-defined recesses 18c formed all around protrusion 18, including the *top and side surfaces*.

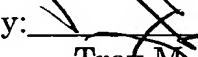
Since Hayashi does not disclose or suggest each and every element of claims 9 and 12, as amended, it cannot anticipate or render obvious those claims or claims dependent thereon. The rejections under 35 USC 102(b) and 103 should be withdrawn.

Conclusion

This application is now believed to be in condition for allowance. The Examiner is invited to telephone the undersigned to resolve any issues that remain after entry of this amendment. Any fees due in connection with this response may be charged to our Deposit Account No. 50-1314.

Respectfully submitted,
HOGAN & HARTSON L.L.P.

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By: 
Troy M. Schmelzer
Registration No. 36,667
Attorney for Applicant(s)

500 South Grand Avenue, Suite 1900
Los Angeles, California 90071
Phone: 213-337-6700
Fax: 213-337-6701